Amendments to the Specification:

Please replace the paragraph starting on page 1, line 13 with the following amended paragraph:

As illustrated in Figure 1, a conventional optical transmission system (hereinafter, "system") includes: an optical signal transmitting/receiving unit 10 for converting an optical signal into an electrical signal; a path signal control unit 20 for carrying out path control and auto path protection operation by demultiplexing an output signal of the optical signal transmitting/receiving unit 10; a subscriber service processing unit 30 for processing voice and data of a local subscriber inputted through a path set by the path signal control unit 20; an optical signal transmitting/receiving unit 40 for converting an electric signal of a remote subscriber outputted from the path signal control unit 20 into an optical signal to thus transmit the same; and a system control unit [[40]] 50 for controlling the overall operation of the system.

Please replace the paragraph starting on page 2, line 15 with the following amended paragraph:

The "path provision function" is a function for configuring an appropriate path according to the system operation mode and network configuration, which is slightly differentiated according to the system operation mode, as illustrated in Figures 3A and 3B. The terminal operation mode and the ADM (Add-Drop Mode) operation mode provides a through path and an add-drop path (Figure 3A), respectively, and the ring operation mode provides a through path and a ring add-drop path (Figure 3B).

Please replace the paragraph starting on page 3, line 4 with the following amended paragraph:

The add-drop path serves to connect the optical signal received from the east or west to the subscriber service processing [[uni30]] unit 30. [[Th]] The path for connecting the

optical signal to the subscriber service processing unit 30 is referred to as "drop", and the path for connecting the signal inputted from the subscriber service processing unit 30 is referred to as "add".

Please replace the paragraph starting on page 4, line 3 with the following amended paragraph:

In the system operation mode of the ring operation mode, the optical signal transmitting/receiving unit 10 is not duplexed, and the direction of receiving a path signal demultiplexed from the optical signal is switched to one of the east and west, thereby preventing a service fail. In this way, the function of automatically changing the direction of receiving a path signal so as to maintain the continuity of a service by automatically detecting a network fail in the system of the ring operation mode is called [[as]] an "auto path protection function". That is, a transmission signal is transmitted to both sides of the system, and a receiving signal is received from the direction of the good state, thereby maintaining the continuity of the path signal.

Please replace the paragraph starting on page 4, line 12 with the following amended paragraph:

Figure 3B is a view illustrating a path provision and auto path protection structure in the ring operation mode according to the conventional art. As illustrated in Figure 3B, the optical transmission system of the ring operation mode receives optical signals from both directions, the east and west, and monitors the state of optical signals and ~~demlultiplexed~~ demultiplexed path signals, for thereby changing the direction of receiving signals so that no service fail occurs when the corresponding signals have a fail.

Please replace the paragraph starting on page 9, line 1 with the following amended paragraph:

In other words, in the add-drop & through path, a path signal received from the east is dropped to a subscriber service processing unit 30, the path signal received from the subscriber service processing unit 30 is added to the west, and the path signal received from the west has a path passed through the east and a path of the opposite direction. At this time, the former path is called [[as]] an east-west add-drop & through path, and such a path configuration is called [[as]] "round". Thus, the present invention can implements [[an]] a one-to-n path configuration in which a path signal is added to system 1 and is dropped to system n, as well as an one-to-one path configuration as in the conventional art in the linear add-drop multiplex network as illustrated in Figure 2.

Please replace the paragraph starting on page 11, line 15 with the following amended paragraph:

When a problem occurs to a path signal currently in service due to a fail occurrence, the system that has detected the current fail state for the first time judges whether its signal path will be protected or not, carries out path protection, and then delivers a request of its state and protection to a remote system via the data channel (K1 and K2). Since then, the systems matches their path configuration with one another while transmitting/receiving K1 and K2 data. [[AT]] At this time, the path must be configured in such a manner that a signal has to return to its starting point after passing through all systems in the network. Thus, by the above-mentioned path configuration, the present invention can usefully ~~provides~~ provide new services, and effectively use the bandwidth of a transmission signal.

Please replace the paragraph starting on page 12, line 6 with the following amended paragraph:

4) The system having detected a SF delivers a state message of remote ~~deteet~~ defect indication (RDI), and delivers a SF condition to the opposite direction, thereby making an adjacent system understand its state.

Please replace the paragraph starting on page 15, line 6 with the following amended paragraph:

The system S1 carries out auto protection of the "add-drop path", i.e., automatically changes the direction of receiving a path signal from the east to the west, and thereafter delivers its status and a protection request to the system S0 by the K1 and K2. In addition, the system S1 changes [[tie]] the opposite direction of the direction of detecting a SF to the "signal fail state (SF state)", and changes the direction of receiving the SF to the "remote ~~deteet~~ defect indication state (RDI state)".

Please replace the paragraph starting on page 15, line 17 with the following amended paragraph:

The system [[S9]] S0 carries out a round-type path protection according to a path protection request signal (ROUND/0) as illustrated in Figure 8C. For example, a path signal received from the west is dropped to the subscriber service processing unit, a path signal received from the subscriber service processing unit is added to the east, and a path signal received from the east is passed through the west.

Please replace the paragraph starting on page 15, line 22 with the following amended paragraph:

If the path protection is completed, the system [[0]] S0 changes its status to the "rounded state", and then delivers its status signal (ROUND/0) respectively to the systems S1 and S3. And, the system S0 delivers a path protection request signal (ROUND/3) for

carrying out the same path protection as itself to the system S3, and delivers a reverse request round (RRR/1), i.e., a response to the round request, to the system S1.